### CERTIFIED AGGREGATE TECHNICIAN TRAINING COURSE AGENDA

<u>Title – Time</u>	Subjects	Instructor	Reference
	<b>Monday Morn</b> i Moderator: Ron W		
Introduction			
10:00	Opening Comments	Ron Walker	
to 10:30	Agenda/Manual Update		
CAPP Technician Prog	gram Responsibilities		
10:30 to 10:45	Industry Perspective	Robert Jones	
Math for Aggregates			
10:45	Round-Off Rules	Ron Walker	Chp 1
to 11:15	Calculator Operation		
	Mean		
	Standard Deviation		
	Moving Average		
Geology			
11:15 to 12:00	Origin	Nelson Shaffer (Marni Karaf)	Chp 2
12:00 to 1:00	** LUNCH **		

### **Monday Afternoon**

Moderator: Bob Rees

#### **Aggregate Quality**

1:00 to	Aggregate Types & Terms	Bob Rees (JoAnn McMillan/	Chp 2
2:00	Properties	Brad Williamson)	Chp 3
	Quality Requirements		Chp 4

2:00 to 2:15 \*\* BREAK \*\*

#### **Tests for Quality Rating**

2:15	Absorption	Bob Rees	Chp 4/Chp 10
to		(JoAnn McMillan/	
3:00	Abrasion Resistance	Brad Williamson)	

Soundness

Deleterious Materials

Special Requirements

3:00 to 3:15 \*\*BREAK\*\*

### <u>Test for Quality Rating</u> (continued)

3:15		Bob Rees
to 4:30		(JoAnn McMillan/
4:30		Brad Williamson)
5:00	**DINNER**	

#### Help Session

7:30

Holiday Inn Express: Bob Lingerfelt/Trent Sanders/George Williams Dave Hamilton/Deana Jones/Stu Schwotzer

# **Tuesday Morning**Moderator: Bob Rees

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8:00 to 8:10	Answers & Discussion	Bob Rees	
Processing			
8:10 to	Extraction	Bob Lingerfelt Jim Schultz	Chp 5
8:45	Crushing	George Williams	
	Other Benefaction		
	Screening		
	Sand Production		
	Segregation		
	Stockpiling and Handling		
	Degradation		
	Contamination		
	Retrieval		
Segregation			
8:45 To 9:00	Video	Bob Dahman Dave Hamilton Kurt Sommer	
Test Equipment			
9:00	Suggestions	Stu Schwotzer	Chp 8
to 9:30	Manufacturers & Cost	(Jim Fletcher)	Handout
9:30 to 9:45	** BREAK **		
Lab Layout			
9:45 to 10:15	Suggestions	Bob Lingerfelt Jim Schultz George Williams	

## $Tuesday\ Morning\ (\ continued\ )$

### Test Equipment Verification

10:15 to 10:45	Procedures	Bart Williamson	Chp 8 ITM 211-9.0 Appendix A
Production Sampling			
10:45 to 11:15	Sampling Techniques	Bob Lingerfelt Jim Schultz George Williams	Chp 9
Stockpile Sampling			
11:15	Safety	Bob Dahman Dave Hamilton	Chp 9
to 11:45	Sampling Technique	Kurt Sommer	Chp 9/Video
	Sample Reduction & Sample Size		Chp 9/Video
Aggregate Testing			
11:45	Decant	Bob Dahman	Chp 10/Video
to 12:00	Sieve Analysis	Dave Hamilton Kurt Sommer	Chp 10/Video
	Sieve Analysis (Dense Graded)		Chp 10/Video
	Fineness Modulus		Chp 10
	Moisture		Chp 10
	Coarse Aggregate Angularity		Chp 10
	Non-Durable Particles		Chp 10
	Flat and Elongated Particles		Chp 10
	Frequency		Chp 11
	Homework Problems		Handouts

# **Tuesday Afternoon**Moderator: Bob Rees

1:00 to 2:30		Bob Dahman D ave Hamilton Kurt Sommer	Chp 10/Chp 11
2:30 to 2:45	** BREAK		
Aggregate Testing ( c	ontinued )		
2:45 to 3:45		Bob Dahman Dave Hamilton Kurt Sommer	Chp 10/Chp11
<u>Diary</u>			
3:45 to 4:00	CAPP Requirements Typical Diary Examples	Bob Lingerfelt Jim Schultz George Williams	ITM 211 (10.0) Chp 11
Help Session 7:30	Holiday Inn Express:	Bob Lingerfelt/Jon Havens Deana Jones/Rich Brooks/ George V	Villiams
		Dave Hamilton/Stu Schwotzer	

# Wednesday Morning Moderator: Ron Walker

### Aggregate Testing Homework Review

12:00 to 1:00

Answers & Discussion Math Revue	Ron Walker	Handout
CAPP QCP Requirements INDOT QCP Checklist QCP Addenda	Ron Walker	Chp 7 Chp 7
Producer QCP's	Trent Sanders (Jon Havens / Rich Brooks)	Chp 7 Chp 7
** BREAK **		
Statistical Control		
CAPP Requirements	Ron Walker	ITM 211
Statistical Quality Control Statistical Concepts Z Value Percent Compliance Letter Counting Exercise	Ron Walker Bob Rees Jim Plew George Williams	Chp 6
	CAPP QCP Requirements INDOT QCP Checklist QCP Addenda Producer QCP's  ** BREAK **  Statistical Control  CAPP Requirements  Statistical Quality Control  Statistical Concepts  Z Value  Percent Compliance	CAPP QCP Requirements INDOT QCP Checklist QCP Addenda  Producer QCP's  Trent Sanders (Jon Havens / Rich Brooks)  ** BREAK **  Statistical Control  CAPP Requirements  Ron Walker  Statistical Quality Control  Statistical Quality Control  Statistical Concepts  Statistical Concepts  Jim Plew George Williams  Z Value  Percent Compliance

\*\* LUNCH \*\*

### Wednesday Afternoon

Moderator: Bob Rees

### Aggregate Production Statistical Control (continued)

1:00 to	Control Chart Concepts	Ron Walker/Bob Rees (Jim Plew/	Chp 6 ITM 211 (13.4)
2:00	Control Chart Construction Control Chart Interpretation	George Williams)	
2:00 to 2:15	** BREAK **		
2:15 to	Product Set Up	Jim Plew George Williams	Chp 6
4:00	Process Control	Ü	
	Understanding the Process & Steps for Managing Quality		

### **Help Session**

Jim Plew/Trent Sanders/Bob Lingerfelt/Mark Rademaker Trina Smart/Jon Havens/ George Williams 7:30 Holiday Inn Express:

Stu Schwotzer/Rich Brooks

**Thursday**Moderator: Bob Rees

<u>Lab Demonstration at INDOT Materials Management</u> (Bus leaves at 7:30)				
	8:00 to 12:00	aves at 7.50)	Bob Rees Brad Williamson, JoAnn McM Al Witty, Jim Plew Trinia Smart, Stu Schwotzer Bart Williamson	illan
	12:30 to 1:30	** LUNCH **		
Statistica	al Homework F	Review		
	1:30 to 1:45	Answers & Discussion	Bob Rees	Handout
Audits				
	1:45 to 2:00	INDOT Audits	Bob Rees	Appendix D
	2:00 to 2:15	** BREAK **		
Custome	er Expectations			
	2:15 to 2:45	Producer Perspective (CAPP)	George Williams (Jim Schultz)	
	2:45 to 3:15	Contractor Perspective (PCCP)	Dick Newell	
	3:15 to 3:45	Contractor Perspective (HMA)	Dudley Bonte	
Review	Session (Volun	<u>itary)</u>		
	3:45 to 5:00		Bob Rees Ron Walker	
Help Ses	ssion			
,	6:30		on Havens/ Jim Plew hn Yzenas/Stu Schwotzer	

Trina Smart/George Williams/Rich Brooks

# Friday Morning Moderator: Bob Rees

### Course Exam

8:00

to

12:00